

Appl. No. 10/708,872
Amdt. dated July 3, 2006
Reply to Office action of April 7, 2006

REMARKS/ARGUMENTS

1. Rejection of claims 1-8 and 10-17 under 35 U.S.C. 102(e):

Claims 1-8 and 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Shioda (US 2002/0183071) for reasons of record.

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Response:

The applicant would like to point out the patentable differences between claims 1, 6, 10, and 17 of the instant application and Shioda.

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Claims 1 and 17 recite the limitation "when the mobile station is less than a predetermined distance away from a nearby base station in the mobile phone network, the position of the mobile station is set to be equal to the position of the nearby base station". As explained in paragraph 0055 of the specification, when a mobile station detects that it is very close to a base station, the mobile station will use the longitude and the latitude of the base station to recalibrate the position information of the mobile station. Assigning the position data in this way helps to increase the accuracy of the mobile station's reported position.

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On the other hand, Shioda teaches in paragraphs 0127-0131 and in paragraphs 0168-0183 that the current position of the mobile station can be calculated based on the radio waves received from the base stations and the error information corresponding to each base station. That is, Shioda merely teaches a way to calculate the position of a mobile station while also calculating a standard of deviation error, or a "positioning error". The mobile station then provides the position information to a nearby base station, and the base station responds with navigation information such as a map of the local area (paragraphs 0181-0183). As shown in Fig. 22A, the mobile station receives a map of the local area, and the approximate position of the mobile

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station is marked on the map with a letter "P". A circle showing the possible range of locations of the mobile station due to the uncertainty caused by the positioning error is indicated by the circle Cerr. Therefore, Shioda only teaches a way to calculate an approximate position of the mobile station through triangulation using signals of
5 three base stations. Shioda does not teach or suggest setting the position of the mobile station to be equal to the position of the base station when the mobile station is less than a predetermined distance away from the base station. For these reasons, claim 1 and claim 17 are both patentable over the Shioda reference.

10 Claims 6 and 10 recite that only base stations having a reliability coefficient above a predetermined threshold level are selected to be one of the three base stations that the mobile station identifies as having the strongest RSSI levels. To ensure that only the most reliable positioning information is used for calculating the position of the mobile station, the present invention method restricts only those base
15 stations having a reliability coefficient above a predetermined threshold level for being used to calculate the position of the mobile station.

In contrast, Shioda teaches in paragraphs 0081-0083 and 0091 that the mobile station receives incoming radio waves from a base station along with a
20 corresponding correlation value. The correlation values are explained in detail in paragraphs 0010-0012, and are not analogous to a reliability coefficient. Instead, Shioda's correlation values are used to derive propagation ranges that help to calculate the current position of the mobile station. Therefore, Shioda does not teach that only the base stations generating radio waves with reliability coefficients greater
25 than a threshold level are selected to be one of the three base stations used for calculating the position of the mobile phone. For these reasons, claim 6 and claim 10 are both patentable over the Shioda reference.

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In addition, claims 2-8 and 11-17 are dependent on claims 1 and 10, and should be allowed if claims 1 and 10 are allowed. Reconsideration of claims 1-8 and 10-17 is respectfully requested.

5 Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

10 Winston Hsu Date: 07.03.2006

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